



7528

Dart Aerospace Ltd.
1270 Aberdeen St
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K6A 1K7
Canada

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RB23007638
Job Sheet 186979



Part No: RB23007638

Job Qty: 8 ea

Part Name: Fuel Injector Wrench



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/23/18

Job Tracking No:

Due Date: 1/11/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: IPP Rev A 17.11.03 New issue DP Verify DD

Ship Via:

Bill of Materials**Job Routing**

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	8 Ea	1/11/19	1/11/19	0.00	0.00	Start Up Small Fab-2		MLL
110	Small Fab	8 pcs	1/11/19	1/11/19	0.00	1.60	Small Fab		MLL BAS
120	QC	8 pcs	1/11/19	1/11/19	0.00	0.00	QC5		38
130	Packaging	8 pcs	1/11/19	1/11/19	0.00	0.00	Packaging3		21 JAN 18 2019
140	QC21-SA	8 Ea	1/11/19	1/11/19	0.00	0.00	QC21		GA139D

Part Op 110 - Assemble as per DWG. Sheet 1
Descriptions:

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
3896T31	Ferule 1/16 X 3/8" - Aluminum	16 Ea (2 ea)	90-Start up Operation	5004066
CL-2-C 21	Lanyard Wire	8 ft (1 ea)	90-Start up Operation	3093863
RB23007638-1	Wrench	8 Ea (1 ea)	90-Start up Operation	4119830
RB23007638-3	Cap, Modified	8 Ea (1 ea)	90-Start up Operation	5144182

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	3896T31	16	545	0
	CL-2-C	8	515	0
	RB23007638-1	8	15	0
	RB23007638-3	8	7	0



Container No: S145390



Part: RB23007638

Job No: 186979

Serial No/Batch: S145390

Revision: 3

Inspector:

Exp Date:

Instructions:

Part Specifications

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
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Email: sales@dartaero.com
www.dartaerospace.com

Plex 11/23/18 12:33 PM Dart.lajeunesse.marie

Date: 01/16/19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

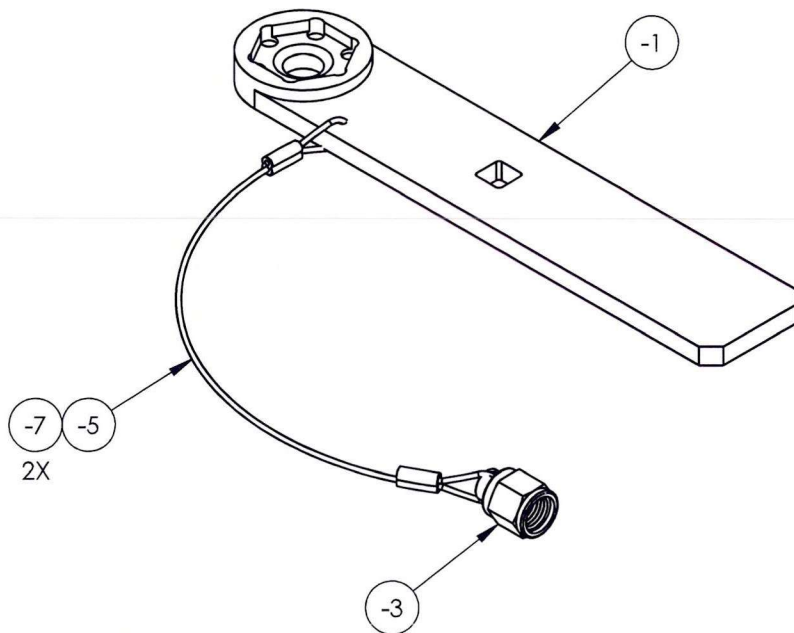
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
☐ OTHER : _____					

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		TOOL UPDATED FOR MODERN MANUFACTURE; SUPERCEDES WRENCHES: 269T9218, 23002215, & OLD 23007638.	9/25/2003	-	-
2		CHANGED DASH No'S; CABLE WAS -1, CAP WAS -2, & WRENCH WAS -3. ALSO IMPLEMENTED NEW BOM, TITLEBLOCK, & REV. TABLE.	11/20/2007	WP	DW
3	15-0471	UPDATED TO NEW DRAFTING STANDARDS. ADDED USED ON NOTE. -1 CH'D DIMS WAS .375-.378 IS 2X .378-.383, WAS .505 MIN IS 2X .505 MIN, WAS R.75 IS Ø1.50. ADDED ENGRAVE NOTE. -3 ADDED DRAWING. -5 ADDED B/O REF. #CL2-C. -7 ADDED B/O REF. #3896T31. CH'D TOLERANCES ON NON-CRITICAL DIMENSIONS.	1/5/2016	DPD	JAG



SHOP COPY
RETURN TO
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 186979 MJS
18-11-23

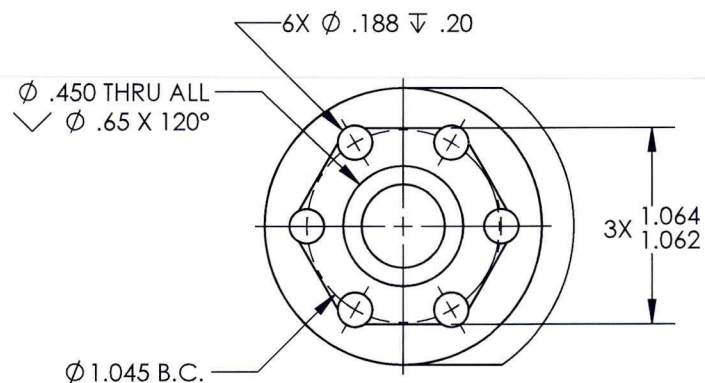
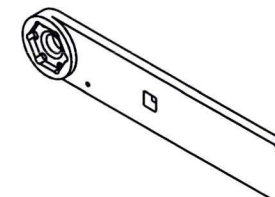
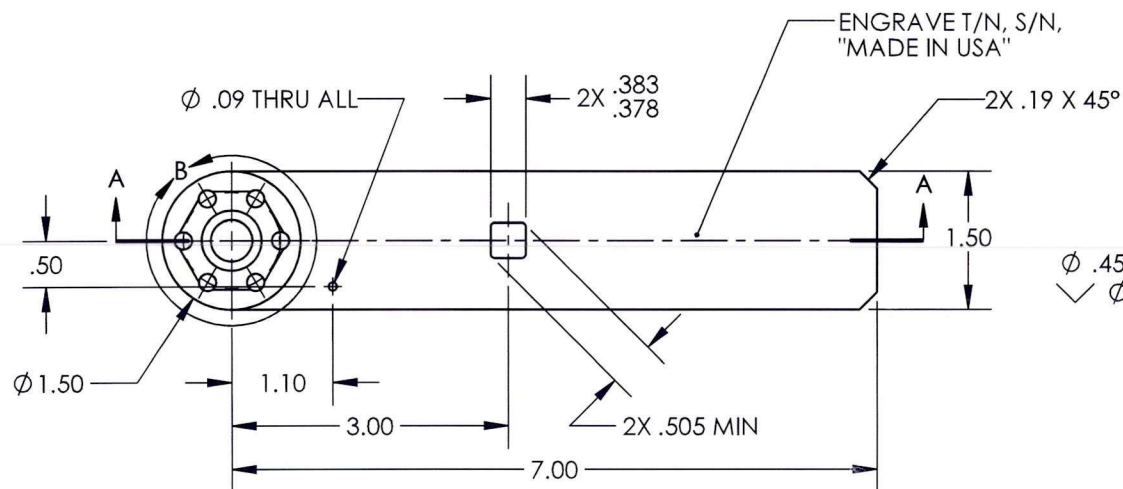
- NOTE:
1. REPLACES ROLLS ROYCE 23002215 AND SCHWEIZER 269T9218.
2. USED ON SCHWEIZER, ALLISON, ROLLS ROYCE.

DART AEROSPACE	
TITLE WRENCH - FUEL INJECTOR	
DWG NO. RB23007638	REV 3
MAT'L FEAT TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125°
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: MACKOVJAK	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	SEE NOTE 2
SCALE 1:2	DATE 8/25/2003
SHEET 1 OF 3	

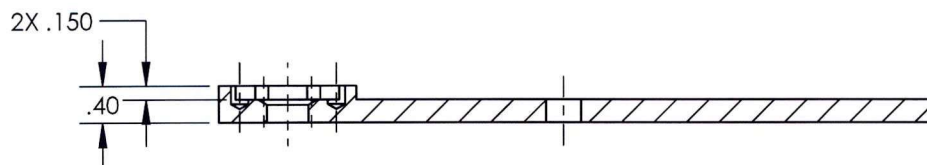
ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	WRENCH	4140/4142		2
			-3	1	CAP	ALUMINUM	AN929-4 MODIFIED	3
		B/O	-5	1	CABLE	COATED STEEL	Ø1/16 X 9 (CARR LANE #CL2C)	1
		B/O	-7	2	FERRULE	ALUMINUM	Ø1/16 X 3/8 (MCMASTER-CARR #3896T31)	1

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0471	-1 CH'D DIMS WAS .375-.378 IS 2X .378-.383, WAS .505 MIN IS 2X .505 MIN, WAS R.75 IS Ø1.50. ADDED ENGRAVE NOTE.	1/5/2016	DPD	JAG



DETAIL B
SCALE 1 : 1



SECTION A-A

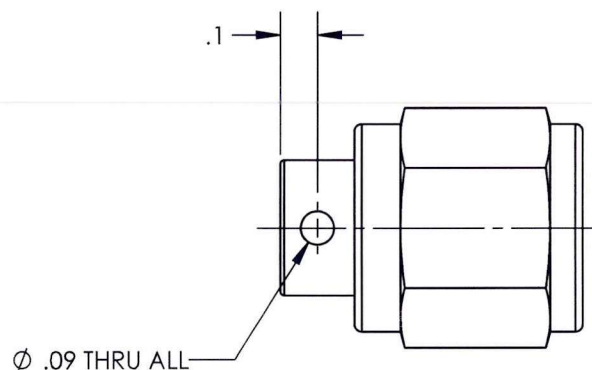
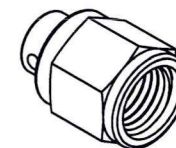
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WRENCH

DART AEROSPACE	
TITLE WRENCH - FUEL INJECTOR	
DWG NO. RB23007638-1	REV 3
MAT'L 4140/4142 HEAT TREAT RC 36-40 FINISH BLACK OXIDE SPEC DRAWN BY: COLE CHECKED: OPPTS APPR: QA APPR: APPROVED:	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/✓ 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL SEE NOTE 2 SHEET 1	
SCALE 1:2	DATE 8/25/2003 SHEET 2 OF 3

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0471	-3 ADDED DRAWING.	1/5/2016	DPD	JAG



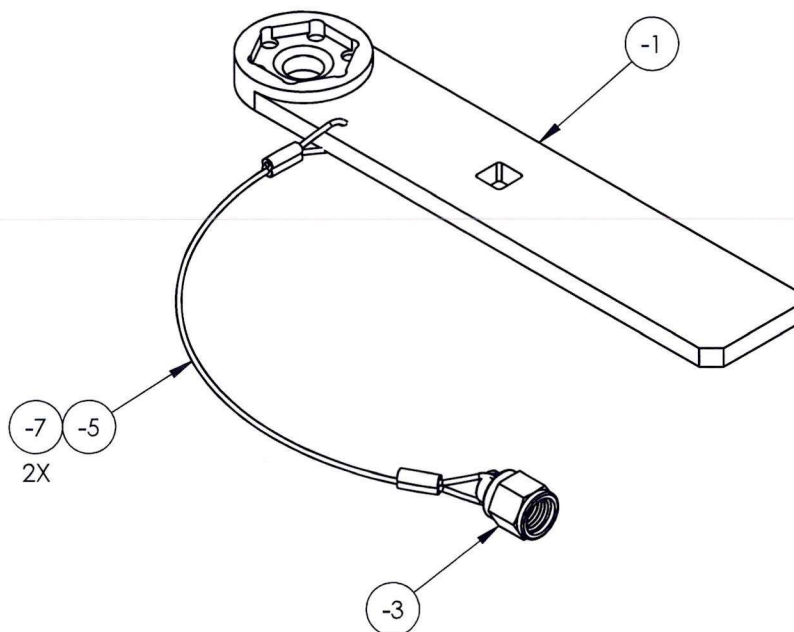
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CAP

DART AEROSPACE	
TITLE WRENCH - FUEL INJECTOR	
DWG NO. RB23007638-3	REV 3
MAT'L ALUMINUM	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH	.XX ± .01 ANGLES ± 5°
SPEC	.X ± .1 SURFACES = 125/✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED:	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR:	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR:	USED ON MODEL
APPROVED:	SEE NOTE 2 SHEET 1
SCALE 2:1	DATE 8/25/2003 SHEET 3 OF 3

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 2. USED ON SCHWEIZER, ALLISON, ROLLS ROYCE.

DART AEROSPACE	
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DWG NO. RB23007638	REV 3
MAT'L HEAT TREAT FINISH	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125°
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: COLE	2. COLE
CHECKED: MACKOVJAK	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	SEE NOTE 2
SCALE 1:2	DATE 8/25/2003
SHEET 1 OF 3	

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			-3	1	CAP	ALUMINUM	AN929-4 MODIFIED	3
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